**IT Applications Unit 3, AOS 2, Organisations and Data Management**

**Structure and role of relational databases, p 97**

1. What is a flat file database?

* A flat file database stores data in tables consisting of rows and columns.

1. Define each of the following terms:
   1. Primary key
   * A field attached to each record in a database. Uniquely identifies each record in a database table.
   1. Field
   * Contains a specific piece of information.
   1. Record
   * A set of information about one entity
   1. Form
   * Allows an input screen to be formatted and linked to an underlying table or query
   1. Query
   * Used to filter a set of data
   1. Report
   * Formats the query data and allows you to add summary statistics, such as totals as well as headings to make the information easier to read and understand
   1. Macros
   * Carry out a set of pretermitted tasks

**Data types and formats**

1. List the following **data types** and characteristics of each with examples.
   1. Text
   * Alphanumeric, up to 255 characters, it is searchable
     + Name, address, postcode, telephone number
   1. Numeric
   * Numbers only
     + Any number that will be used in a calculation
   1. Currency
   * Numbers but in dollar amounts, formatted with the $ symbol and .00 as a default
     + Any number used to represent a financial value; usually only applied to a total rather than values in a list
   1. Date/time
   * A variation of numbers but formatted to represent a date and/or time
     + Any date, can be used in calculations
   1. Boolean
   * Represents one or two states – true/false
     + Also represented as yes/no and on/off
   1. Object
   * Images, audio, video or similar
     + Media or other documents
   1. Memo
   * Like text but unlimited, it is not searchable
     + Any long selections of text
2. **Data Formats:**

Elaborate on the following common data formats:

* 1. Text
  + Each field will be formatted to hold a different number of characters and have different sizes
  1. Fixed decimal places
  + Certain numeric values, decimal places will appear as whole numbers
  1. Date
  + Can be made to display in different ways
  1. Date/time
  + A variation of date where you can show time to minutes and seconds if necessary
  1. Dollar, currency
  + $ symbol is displayed, defaults to .00 after the value
  1. True/false, Boolean logic
  + Can be displayed as words or as check or tick boxes to make data entry easier